

**The effect of cryopreservation on seed germination of the endangered medicinal plant
Ferula iliensis Krasn. ex Korovin**

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Cryopreservation is the only technique ensuring the safe and cost-effective long-term conservation of a wide range of plant species. Slow growth storage is routinely used in many laboratories for medium-conservation of numerous plant species. Significant progress has been made for conserving endangered, rare, medicinal species. Seed survival after storage in liquid nitrogen (-196°C) was examined in endangered medicinal plant *Ferula iliensis* grown in Kazakhstan. The experiment was performed on seed *F. iliensis* collected different populations to compare germination in two variants: 1) control; 2) liquid nitrogen (-196°C). The results of 7 days showed the seeds germination in liquid nitrogen (24-26%) was higher than compare with control (16-18%). As well as 15 days cryopreservation this indicator was reached up to 42-48%, were in control variant (28-30%). 60 day frozen seeds germinate good in temperature of $21-23^{\circ}\text{C}$ during 40-50 days of germination reached up to 80-90%. The true leaves were appeared after 30 days. The overall conclusion is to initiate and support for conservation, sustainable utilization of medicinal plants. It also promotes the Conservation of threatened species of medicinal plants and their habitats for livelihood security through conservation of wild medicinal plants based on sustainable harvesting and by implementing various conservation techniques.